

**REMARKS**

Claims 1-20 are pending in this application. Claim 21 has been added and contains subject matter removed from claim 5. No new matter has been added.

1. Drawings

The drawing, Fig. 1, was objected to for failure to comply with 37 C.F.R. 1.84(p)(4). The drawing was also objected to because it did not include reference characters 11 and 34. Reference character 11 was erroneously used to refer to “gas flow” on page 10, line 23. The proper reference character for “gas flow” is reference character 8. Similarly, reference character 34 was erroneously used to refer to “bars” on page 10, line 27. The proper reference character for “bars” is reference character 32. Therefore, aside from the removal of the superfluous reference character 12 discussed above, no other corrections to the drawing were necessary. Reconsideration and removal of the objection is respectfully requested.

2. Specification

The Examiner objected to the Abstract because the word “processes” on line 22 was misspelled. Applicant has amended the Abstract to correct the spelling of the word “processes”. Reconsideration and removal of the objection is requested.

The Examiner also objected to the Specification because the claim terminology was used inconsistently. The Examiner thoughtfully provided a chart summarizing how the same

element was referred to using different terminology throughout the Specification. Applicant has made the necessary changes in the substitute Specification attached hereto. Reconsideration and removal of the objection is respectfully requested.

Applicant would also like to point out that page 5 of the Specification at line 1 and 15 were amended to insert the description recited in the claims. No new matter was added in preparing the substitute Specification.

3. Claim Rejections under 35 U.S.C. §112, second paragraph

The Examiner has rejected claims 1-20 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Examiner's comments are summarized on pages 4-6 of the Office Action. The Examiner has generally rejected the claims because the relationship between particular elements in the claims is unclear. Applicant has amended to claims to clarify the relationship of elements with respect to one another in the invention. No new matter has been added. The Examiner has also rejected claims 11, 15, 16 and 17 for lacking proper antecedent basis support for elements contained therein. Finally, claims 13-14 were rejected for failure to use the proper Markush phrasing. Applicant has amended the claims to provide proper antecedent basis support for claims 11 and 15-17. Applicant has also amended the claims to use the proper Markush phrasing. Applicant believes that the foregoing claim amendments have obviated the indefiniteness rejections. Accordingly, reconsideration and removal of the rejections is respectfully requested.

4. Rejections under 35 U.S.C. §102

The Examiner has rejected claims 1-7, 13 and 14 under 35 U.S.C. §102(e) as being anticipated by Ruottu et al. (U.S. 6,045,688). Applicant has amended the instant application to convert the present application into a Continuation-in-Part application of the '688 application. Applicant submits that this is proper as both applications share at least one inventor in common and were copending for at least one day. Accordingly, Applicant respectfully requests that the anticipation rejection in view of the '688 patent be removed.

The Examiner has rejected claims 1, 2, 7 and 13-15 under 35 U.S.C. §102(b) as being anticipated by Squires (U.S. 4,032,305). The Examiner argues that Squires discloses a process for thermal conversion of carbonaceous feedstocks selected from biomass and organic wastes wherein the feedstock is fed into a fluidized bed reactor and is converted at an elevated temperature under the influence of particulate matter kept in a fluidized state by a fluidizing gas. The particulate matter is then transferred from the reactor to a regenerator for regeneration and then recirculated to the reactor after the regeneration. The converted hydrocarbon products are recovered from the reactor. The Examiner argues that the elements of the Squires apparatus anticipate the instant claims.

Applicant would like to point out that the claims have been amended to more clearly define the invention. In particular, the claims have been amended to set forth the positional relationship of the elements used in the instant process. It is now clear that elements of the

instant invention are arranged in a different manner from that of Squires. The Squires apparatus does not define an apparatus of concentric structure. Thus, the Squires apparatus differs from the present invention both with respect to its construction and, hence its function. Accordingly, Applicant submits that the invention as presently claims is patentably distinguishable over the Squires reference. Reconsideration and removal of the rejection are respectfully requested.

5. Rejections under 35 U.S.C. §103(a)

The Examiner has rejected claims 3, 5, 6, 16 and 17 under 35 U.S.C. §103(a) as being unpatentable over Squires (U.S. 4,032,305). The Examiner argues that it would be obvious to a person of ordinary skill in the art to select an appropriate vapour residence time for the method of Squires; use an internally located channel in the circulating fluidized bed reactor of Squires; use an internally located channel for recirculation of solid matter to the regenerator and use an internal channel for recirculation of solid matter within the reactor. Claim 4 has been rejected as unpatentable over Squires in view of Munday (U.S. 2,515,155). Munday is cited for disclosing the use of louvered vanes to separate solids from gases. The Examiner, therefore, argues that it would be obvious to use louvered vanes with the cyclone separator of Squires. Finally, claim 8 has been rejected under 35 U.S.C. §103(a) as unpatentable over Squires in view of Ogorzaly et al. (U.S. 2,689,787). Ogorzaly is cited for teaching a drier comprising a shaft of annular cross-section and having a cyclone or separator with multiple inlets.

As discussed above, the claims have been amended to more precisely define the process and the components used therein. This process is distinguishable from Squires. Squires simply


does not describe a concentric apparatus. It therefore follows that combining the references in the manner suggested by the Examiner would not result in the apparatus used in the instant process. As such, Applicant submits that the present process is novel and non-obvious in view of the prior art. Reconsideration and removal of the obviousness rejections is respectfully requested.

6. Double Patenting

The Examiner has rejected claims 1-7 and 13-14 under the judicially created doctrine of obvious-type double patenting over claims 1-12 of U.S. Patent No. 6,045,688. U.S. Patent No. 6,045,088 is assigned to Fortum and Gas Oy, a wholly owned subsidiary of Fortum Oyj, the assignee of the instant application. Therefore, the present application and the '688 patent are considered to be commonly owned. Applicant hereby submits a terminal disclaimer to overcome the double patenting rejection. Reconsideration and removal thereof is respectfully requested.

Favorable consideration and early allowance of the claims is requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Leonard R. Svensson (Reg. No. 30,330) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

By   
Leonard R. Svensson, #30,330

Attachment(s):      Substitute Specification (Clean and Marked-Up Versions)  
                              Corrected Drawing (Clean and Annotated Marked-Up Versions)  
                              Terminal Disclaimer  
                              Substitute Abstract (Clean and Mark-Up Versions)

Whereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: November 3 2003  
(Date of Deposit)

**BIRCH, STEWART, KOLASCH & BIRCH, LLP**

Jessie M. Fitzgerald  
(Signature)  
Nov. 3, 2003  
(Date of Signature)